

APPROVED



Awards					
Higher Certificate					
Programme Code:	Dk_SAPBI_6	Mode of Delivery:	Full Time	No. of Semesters:	5
NFQ Level:	6				
Department:	Applied Sciences				

Programme Outcomes

On successful completion of this programme the learner should be able to :

PO1	Knowledge - Breadth	
	(a)	Specialised knowledge of a broad area. The learner is expected to have a good grounding Knowledge-breadth Specialised knowledge of a broad area. The learner is expected to have a good grounding in: <ul style="list-style-type: none"> - a broadly-based scientific core - basic mathematics - elements of specialisation in a particular sub-field of science
PO2	Knowledge - Kind	
	(a)	Some theoretical concepts and abstract thinking with significant underpinning theory. The learner is expected to have a good grounding in: the terminology, nomenclature, and/or classification systems appropriate to the subject area <ul style="list-style-type: none"> - the general principles of the subject area, including relevant concepts and theories - relevant legal, quality and regulatory frameworks - basic methods and scientific techniques for acquiring, processing, analysing and presenting subject-specific information
PO3	Skill - Range	
	(a)	Demonstrate comprehensive range of specialised skills and tools. The learner will be able to: <ul style="list-style-type: none"> - apply a range of broadly-based scientific laboratory skills to perform routine tasks accurately - select, gather and record data accurately - work to set targets - operate a range of laboratory and other relevant equipment safely - apply basic numerical and statistical analysis skills - maintain basic records of activities - present scientific results to peers - use standard computer-based office applications
PO4	Skill - Selectivity	
	(a)	Formulate responses to well-defined abstract problems. The learner will be able to: <ul style="list-style-type: none"> - respond to problems and opportunities that are likely to be encountered by a technician, working in a structured and managed environment - participate in the day-to-day operations of a scientific industry, or other scientific work setting - assess and optimise the performance of scientific equipment
PO5	Competence - Context	
	(a)	Act in a range of varied and specific contexts involving creative and non-routine activities: transfer and apply theoretical concepts and/or technical or creative skills to a range of contexts The learner will be able to: <ul style="list-style-type: none"> - follow documented scientific procedures and approved validation and quality assurance procedures to accurately gather, record and process technical information - follow documented scientific procedures to perform routine tasks in structured/managed work settings - behave responsible in a work setting - work in accordance with current health and safety regulations
PO6	Competence - Role	

	(a)	<p>Exercise substantial personal autonomy and often take responsibility for the work of others and/or for allocation of resources, form and function within, multiple complex and heterogeneous groups. The learner will be able to:</p> <ul style="list-style-type: none"> - work individually on routine tasks - contribute effectively and participate in a science based team - participate and contribute constructively in a structured team environment across core scientific disciplines - be self-directed in terms of time, motivation and planning and be self-aware and be open and sensitive to others - accept and exercise personal responsibility - work under guidance within allocated responsibility
PO7	Competence - Learning to Learn	
	(a)	<p>Learn to evaluate own learning and identify needs within a structured learning environment; assist others in identifying learning need. The learner will be able:</p> <ul style="list-style-type: none"> - demonstrate familiarity with the principles of self-directed learning - evince a commitment to continuing education and lifelong learning
PO8	Competence - Insight	
	(a)	<p>Express an internalised, personal world view, reflecting engagement with others. The learner will be able to:</p> <ul style="list-style-type: none"> - demonstrate an awareness of relevant social and ethical issues

Semester Schedules

Stage 1 / Semester 1

Mandatory	
Module Code	Module Title
PHYS S7Z03	Physics Through PBL 1
CHEM S7Z04	Fundamental Chemistry
MATH S7Z01	Mathematics 1

Stage 1 / Semester 2

Mandatory	
Module Code	Module Title
HLSTS8Z01	Health and Safety and Academic Skills (Part 1 of 2)
BIOL S8Z01	Biology (Part 1 of 2)
PHYS S7Z04	Physics Through PBL 2
MATH S7Z02	Mathematics 2
CHEM S7Z05	Chemistry

Stage 2 / Semester 1

Mandatory	
Module Code	Module Title
BIOL S7009	Fundamental Microbiology
CHEM S7003	Intro to Organic Chemistry
INST S7Z02	Analytical Science
HLSTS8Z01	Health and Safety and Academic Skills (Part 2 of 2)
BIOL S8Z01	Biology (Part 2 of 2)

Stage 2 / Semester 2

Mandatory	
Module Code	Module Title
SCIAS7Z01	Molecular Bioscience (Part 1 of 2)
DATA S7Z01	Statistics and Data Analysis
SCIAS7003	Microbial Pathogenesis and Control
ENVR S7008	Applied ecology

Stage 3 / Semester 1

Mandatory	
Module Code	Module Title
SCIAS7Z01	Molecular Bioscience (Part 2 of 2)